

Notice of Allowability

Application No.

10/815,504

Examiner

Seyed Azarian

Applicant(s)

WAKAO, SATORU

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/24/2007 and fax inquiry filed on 9/19/2007.
2. ☒ The allowed claim(s) is/are 1,3-8,10-14 now renumbered as 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Response to Amendment

1. Based on applicant's amendment, filed 7/24/2007, see page 7 through 12 of the remarks, also telephone interview and fax inquiry filed on September 19, 2007, with respect to cancellation of claims 2, 9 and 15-18, and amended claims 1, 5, 8 and 12, have been fully considered and are persuasive, upon further consideration the rejection, of 103(a) for claims 1, 3-8 and 10-14, are hereby withdrawn.

The claims 1, 3-8 and 10-14 now renumbered as 1-12 are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicants Attorney (Steven F. Meyer, Reg No. 35,613), on September 19, 2007, without traverse.

Amendments of the Specification and Claims as follows:

Amendments to the Specification:

Please replace the paragraph beginning at page 25, line 4, with the following rewritten paragraph:

If at least one of the areas 501, 502, and 504 of the selected image file has been altered, the two hash values do not coincide with each other. In this case, the ~~main controller 210~~ second image verification unit 209 determines "altered", in other words, the selected image file is not an original. The determination result of the second image verification unit 209 is sent to the main controller 210.

Please replace the paragraph beginning at page 35, line 2, with the following rewritten paragraph:

~~This invention relates to an image verification apparatus capable of notifying the verifier in an easy to understand way of accessory information which may have been altered out of pieces of accessory information recorded in an image data file. The image verification apparatus includes a verification unit and a display form change unit. The verification unit verifies whether a digital image included in an image file has been altered. The display form change unit changes a display form of additional information included in the image file if the verification unit verifies that the digital image has been altered. As for an image file determined as a result of verification to have been altered, the image verification apparatus changes the display form of the accessory information in a list window for the image file. An image verification apparatus includes a verification unit and a display form change unit. The verification unit verifies whether a digital image included in an image file has been altered. The display form change unit changes a display form of additional information included in the image file if the verification unit verifies that the digital image has been altered. The display form change unit avoids displaying the additional information if the verification unit verifies that the digital image has been altered. The additional information includes a thumbnail image of the digital image.~~

An image verification apparatus includes a verification unit and a display form change unit. The verification unit verifies whether a digital image included in an image file has been altered. The display form change unit changes a display form of additional information included in the image file if the verification unit verifies that the digital image has been altered. The display form change unit avoids displaying the additional information if the verification unit verifies that the digital image has been altered. The additional information includes a thumbnail image of the digital image.

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

Claim 1 (currently amended): An image verification apparatus comprising:

a verification unit which verifies whether a digital image included in an image file has been altered; and

a display form change unit which changes a display form of additional information included in the image file if said verification unit verifies that the digital image has been altered,

wherein said display form change unit avoids displaying the additional information if said verification unit verifies that the digital image has been altered, and

wherein the additional information includes a thumbnail image of the digital image.

Claim 2 (canceled).

Claim 3 (previously presented): The image verification apparatus according to claim 1, wherein said display form change unit displays a predetermined sign with the additional information if said verification unit verifies that the digital image has been altered.

Claim 4 (previously presented): The image verification apparatus according to claim 1, wherein the additional information includes information relating to the image file.

Claim 5 (currently amended): The image verification apparatus according to claim 1, wherein the additional information includes information relating to an apparatus which ~~generated~~ generates the image file.

Claim 6 (previously presented): The image verification apparatus according to claim 1, wherein said verification unit verifies whether the digital image has been altered, using a common key of common key cryptography.

Claim 7 (previously presented): The image verification apparatus according to claim 1, wherein said verification unit verifies whether the digital image has been altered, using a public key of public key cryptography.

Claim 8 (currently amended): A method of displaying additional information included in an image file, said method comprising the steps of:

verifying whether a digital image included in the image file has been altered; [[and]]

changing a display form of the additional information included in the image file if it is verified in said verifying step that the digital image has been altered; and

avoiding displaying the additional information if it is verified in said verifying step that the digital image has been altered,

wherein the additional information includes a thumbnail image of the digital image.

Claim 9 (canceled).

Claim 10 (previously presented): The method according to claim 8, further comprising the step of:

displaying a predetermined sign with the additional information if it is verified in said verifying step that the digital image has been altered.

Claim 11 (previously presented): The method according to claim 8, wherein the additional information includes information relating to the image file.

Claim 12 (currently amended): The method according to claim 8, wherein the additional information includes information relating to an apparatus which ~~generated~~ generates the image file.

Claim 13 (previously presented): The method according to claim 8, wherein a common key of common key cryptography is used to verify whether the digital image has been altered.

Claim 14 (previously presented): The method according to claim 8, wherein a public key of public key cryptography is used to verify whether the digital image has been altered.

Claim 15 (canceled).

Claim 16 (canceled).

Claim 17 (canceled).

Claim 18 (canceled).

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance.

This invention relates generally, to an image verification apparatus and image verification method which verify whether an image file has been altered.

Based on applicant's amendment, with respect to claim 1, representing claim 8, the closest prior art of record (Friedman and Ruhl), Friedman reference is directed to an apparatus that uses a hash function in combination with a "public" or "private" key to determine whether image data has been altered, and Ruhl teaches a "display form change unit". However, neither Friedman nor Ruhl teaches or suggest, among other things, "a display form change unit which changes a display form of additional information included in the image file if said verification unit verifies that the digital image has been altered, wherein said display form change unit avoids displaying the additional information if said verification unit verifies that the digital image has been altered, and, wherein the additional information includes a thumbnail image of the digital image".

These key features in combination with the other features of the claimed invention are neither taught nor suggested by (Friedman and Ruhl) prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner
Group Art Unit 2624
September 22, 2007

Seyed Azarian